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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,493	05/18/2005	Colin J West	540-563	3929

23117 7590 12/12/2007
NIXON & VANDERHYE, PC
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ARLINGTON, VA 22203

EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,493	Applicant(s) WEST ET AL.	
	Examiner John L. Goff	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on 10/1/07. The previous claim objections and 35 USC 112 rejections have been overcome.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by John et al. (U.S. Patent 3,022,870).

John discloses an assembly which forms part of a fuel storage system for an aircraft which comprises two components assembled and sealed together in a fluid-tight relationship each component having a mating surface sealed to the mating surface of the other component with a layer of cured polysulphide sealant therebetween (the Figure and Column 1, lines 10-20 and Column 2, lines 63-72 and Column 3, lines 1-23 and Column 4, lines 41-57).

Regarding the limitation “said assembly comprising at least one said mating surface having a layer of polysulphide sealant cured thereon prior to assembly”, applicants claims 22 and 23 are to the “assembly”, and this limitation is directed to the method of forming the assembly, i.e. “prior to assembly”. John discloses all of the structure of the assembly required by claims 22 and 23 and as such anticipates the claims. (See in particular MPEP 2113 and “Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to

applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.”).

Claim Rejections - 35 USC § 103

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-10, 14(1-10), and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over John in view of Cheron (FR 2498671 and see also the abstract), Ishiara et al. (JP 11072999 and see also the abstract), or Hanson (U.S. Patent 4,697,970).

John discloses a method of assembling components together in sealed relationship which form part of a fuel storage system for an aircraft comprising providing two components each component having a mating surface for sealing to the mating surface of the other component, applying a cured polysulphide sealant to at least one of the mating surfaces, bringing together the mating surfaces and applying a predetermined pressure therebetween for a predetermined period whereby to bring about a sealed fluid-tight joint between the two mating surfaces (the Figure and Column 1, lines 10-20 and Column 2, lines 63-72 and Column 3, lines 1-23 and Column 4, lines 41-57). John teaches bringing together the mating surfaces with the cured polysulphide sealant

applies an accurate amount of the sealant, prevents the sealant from squeezing out from between the mating surfaces, and effectively adheres and seals the mating surfaces (Column 1, lines 32-35 and 68-70). John teaches the cured polysulphide sealant is applied to at least one of the mating surfaces by forming a sealant film between two protective coverings, curing the polysulphide sealant, removing the protective coverings, and then applying the sealant film (Column 2, lines 63-72 and Column 3, lines 1-23). John is silent as to applying the polysulphide sealant directly to at least one of the mating surfaces without first forming a sealant film. However, it is well taken in the art that there are two functionally equivalent techniques available for providing an adhesive such as a sealant between the mating surfaces of two components to be joined which include providing the adhesive as a film or directly coating at least one of the mating surfaces with the adhesive as shown by Cheron, Ishiara, or Hanson (See the abstracts of Cheron and Ishiara and Column 5, lines 37-42 of Hanson). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the polysulphide sealant as taught by John to at least one of the mating surfaces (or both) by directly coating the sealant (and subsequently curing the sealant) as opposed to providing the sealant as a cured film as both coating the sealant directly on at least one of the mating surfaces and providing the sealant as a film were well taken in the art as functionally equivalent techniques as shown by any one of Cheron, Ishiara, or Hanson wherein directly coating at least one of the mating surfaces with the sealant has the advantage of not requiring a separate step of forming the sealant film.

Regarding the limitation of bringing together the mating surfaces after allowing the sealant to cure, John as modified by Cheron, Ishiara, or Hanson is considered to bring together the mating surfaces after allowing the sealant to cure as John requires the sealant be cured prior

to bringing the mating surfaces together otherwise the sealant will squeeze out from between the mating surfaces preventing an accurate amount of sealant to be applied to effectively adhere and seal the mating surfaces.

Regarding claims 3-10, John teaches the application of pressure may be performed by bolting together the two components in their final assembled configuration (Column 3, lines 15-23). John is silent as to the specific heating temperature, pressure, and time for applying the pressure. However, John teaches the sealant when pressed between the mating surfaces gradually increases over time (Column 3, lines 12-15), and John teaches heat may be applied to the sealant to speed the cure (Column 2, lines 71-72 and Column 3, lines 1-4). Absent any unexpected results, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the heating temperature, pressure, and time for applying the pressure to complete the joint of the two components as taught by John as a function of bringing about a sealed fluid-tight joint between the two mating surfaces as doing so would have required nothing more than ordinary skill and routine experimentation.

Regarding claim 14(1-10), John teaches the cured polysulphide sealant film is provided as stored between two protective coverings. There is no specific teaching in John as modified by Cheron, Ishiara, or Hanson that the components having a layer of cured polysulphide sealant thereon include a protective covering. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include on the cured polysulphide sealant taught by John as modified by Cheron, Ishiara, or Hanson a protective covering as was known in John such that the components having a layer of cured polysulphide sealant thereon may be stored prior to use.

6. Claims 11-13, 14(11-13), and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over John and Cheron, Ishiara, or Hanson as applied to claims 1-10, 14(1-10), and 20-23 above, and further in view of Smith et al. (U.S. Patent 3,659,896).

John and Cheron, Ishiara, or Hanson as applied above teach all of the limitations in claims 11-13, 14(11-13), and 15 except for a teaching of applying the polysulphide sealant to painted mating surfaces. Smith discloses a method of assembling components together comprising providing two components each component having a mating surface for sealing to a mating surface of the other component, applying a cured polysulphide sealant to at least one of the mating surfaces, and bringing together the mating surfaces and applying a predetermined pressure therebetween for a predetermined period whereby to bring about a sealed fluid-tight joint between the two mating surfaces (Column 9, lines 48-58 and Column 10, lines 51-75). Smith teaches at least one of the mating surfaces may be painted such as for a painted automobile body wherein as there are no disclosed steps for treating the painted bodies such that Smith is considered to teach applying the polysulphide sealant immediately after the paint has dried (Column 2, lines 73-75 and Column 11, lines 6-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the polysulphide sealant as taught by John as modified by Cheron, Ishiara, or Hanson to painted mating surfaces of the components which form part of an aircraft body as it was known to use polysulphide sealants on painted automobile body components as shown by Smith such that the components may be sealed in their final configuration.

7. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over John and Cheron, Ishiara, or Hanson as applied to claims 1-10, 14(1-10), and 20-23 above, and further in view of Akmal et al. ("Handbook of Adhesive Technology" pp. 319-327).

John and any one of Cheron, Ishiara, or Hanson as applied above teach all of the limitations in claims 16-19 except for a teaching of the polysulphide sealant including transition metal oxide, manganese dioxide, or dichromate curing compound, it being noted John are not limited to any particular curing compound and appear to suggest an organic-cure compound (Column 3, lines 48-55). It is extremely well known to cure polysulphide sealants with any of transition metal oxide, manganese dioxide, dichromate, or organic-cure curing compounds as shown by Akmal (Page 323, second full paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the curing compound in John as modified by Cheron, Ishiara et al., or Hanson any of the extremely well known curing compounds for polysulphide sealant including transition metal oxide, manganese dioxide, dichromate, or organic-cure curing compounds as shown by Akmal only the expected results being achieved.

8. Claims 1, 3-10, 14(1 and 3-10), and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Specification page 1) in view of John.

The admitted prior art discloses a method of assembling components together in sealed relationship which form part of a fuel storage system for an aircraft comprising providing two components each component having a mating surface for sealing to the mating surface of the other component, applying a curable polysulphide sealant to at least one of the mating surfaces, bringing together the mating surfaces and applying a predetermined pressure therebetween for a

predetermined period whereby to bring about a sealed fluid-tight joint between the two mating surfaces (Page 1, lines 9-24). The admitted prior art is silent as to curing the sealant prior to bringing together the mating surfaces, it being noted the admitted prior art does not specifically require the sealant is cured at any point. John similar to the admitted prior art discloses a method of assembling components together in sealed relationship which form part of a fuel storage system for an aircraft comprising providing two components each component having a mating surface for sealing to the mating surface of the other component, applying a cured polysulphide sealant to at least one of the mating surfaces, bringing together the mating surfaces and applying a predetermined pressure therebetween for a predetermined period whereby to bring about a sealed fluid-tight joint between the two mating surfaces. John discloses bringing together the mating surfaces with the cured polysulphide sealant applies an accurate amount of the sealant, prevents the sealant from squeezing out from between the mating surfaces, and effectively adheres and seals the mating surfaces. It would have been obvious to one of ordinary skill in the art at the time the invention was made to cure the sealant as taught by the admitted prior art prior to contacting the mating surfaces as shown by John to apply an accurate amount of the sealant, prevent the sealant from squeezing out from between the mating surfaces, and effectively adhere and seal the mating surfaces.

Regarding claims 3-8 and 10, the admitted prior art is silent as to the specific heating temperature, pressure, and time for applying the pressure. Absent any unexpected results, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the heating temperature, pressure, and time for applying the pressure to complete the joint of the two components as taught by the admitted prior art as modified by John

as a function of bringing about a sealed fluid-tight joint between the two mating surfaces as doing so would have required nothing more than ordinary skill and routine experimentation.

Regarding claim 9, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the pressure as taught by the admitted prior art as modified by John by bolting the components together in their final configuration as was the general technique for forming assemblies of this type as shown by John such that further assembly is not required.

Regarding claim 14(1-10), John teaches the cured polysulphide sealant film is provided as stored between two protective coverings. There is no specific teaching in the admitted prior art as modified by John that the components having a layer of cured polysulphide sealant thereon include a protective covering. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include on the cured polysulphide sealant taught by the admitted prior art as modified by John a protective covering as was shown by John such that the components having a layer of cured polysulphide sealant thereon may be stored prior to use.

9. Claims 2 and 14(2) are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and John as applied to claims 1, 3-10, 14(1 and 3-10), and 20-23 above, and further in view of Lester (U.S. Patent 3,904,038).

The admitted prior art and John as applied above except for a specific teaching of applying the sealant to both of the mating surfaces, it is unclear if the admitted prior art applies the sealant to one or both of the mating surfaces. It is well taken in the art of joining mating surfaces with an adhesive to coat one or both of the mating surfaces as shown by Lester (Column 1, lines 24-27). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to apply the sealant as taught by the admitted prior art as modified by John to one or both of the mating surfaces as was considered well taken in the art and shown by Lester only the expected results being achieved.

10. Claims 11-13, 14(11-13), and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and John as applied to claims 1, 3-10, 14(1 and 3-10), and 20-23 above, and further in view of Smith.

The admitted prior art and John as applied above teach all of the limitations in claims 11-13, 14(11-13), and 15 except for a teaching of applying the polysulphide sealant to painted mating surfaces. Smith discloses a method of assembling components together comprising providing two components each component having a mating surface for sealing to a mating surface of the other component, applying a cured polysulphide sealant to at least one of the mating surfaces, and bringing together the mating surfaces and applying a predetermined pressure therebetween for a predetermined period whereby to bring about a sealed fluid-tight joint between the two mating surfaces. Smith teaches at least one of the mating surfaces may be painted such as for a painted automobile body wherein as there are no disclosed steps for treating the painted bodies such that Smith is considered to teach applying the polysulphide sealant immediately after the paint has dried. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the polysulphide sealant as taught by the admitted prior art as modified by John to painted mating surfaces of the components which form part of an aircraft body as it was known to use polysulphide sealants on painted automobile body components as shown by Smith such that the components may be sealed in their final configuration.

11. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and John as applied to claims 1, 3-10, 14(1 and 3-10), and 20-23 above, and further in view of Akmal.

The admitted prior art and John as applied above teach all of the limitations in claims 16-19 except for a teaching of the polysulphide sealant including transition metal oxide, manganese dioxide, or dichromate curing compound. It is extremely well known to cure polysulphide sealants with any of transition metal oxide, manganese dioxide, dichromate, or organic-cure curing compounds as shown by Akmal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as a curing compound in the admitted prior art as modified by John any of the extremely well known curing compounds for polysulphide sealant including transition metal oxide, manganese dioxide, dichromate, or organic-cure curing compounds as shown by Akmal only the expected results being achieved.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 22 and 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 22 of copending Application No. 11/020,873. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 22 and 23 are fully encompassed by claims 1 and 22 of copending Application No. 11/020,873.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

14. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Applicants amendment to require "after allowing said sealant to cure, bringing together the mating surfaces" is addressed above.

Applicants argue, "In order to support a rejection under 35 USC § 102, the John reference must teach each method step and any specified interrelationship of method steps. Here, the claim requires the step of "bringing together the mating surfaces" only "after allowing said sealant to cure." The John reference clearly teaches allowing the sealant to cure before bringing the mating surfaces together and therefore it not only fails to teach the interrelationship of the curing step **prior to** the bringing together of the mating surfaces step, but actually would lead one of ordinary skill in the art directly away from Applicants' claimed invention.

As a result, John fails to anticipate or render obvious the subject matter of claims 22 and 23 and therefore any further rejection thereunder is respectfully traversed. As noted above, claim 24 has been cancelled without prejudice."

Applicants claims 22 and 23 are to the “assembly”, and the limitations referred to by applicants are directed to the method of forming the assembly, i.e. “prior to assembly”. John discloses all of the structure of the assembly required by claims 22 and 23 and as such anticipates the claims. (See in particular MPEP 2113 and “Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.”).

Applicants further argue, “The Examiner also admits that “John et al. are silent as to applying the polysulphide sealant directly to at least one of the mating surfaces without first forming a sealant film” thereby confirm the above analysis showing that John does not teach this claimed interrelationship between steps. Again, this is a further admission that such teaching would lead one of ordinary skill in the art away from applying the polysulphide sealant directly to one of the mating surfaces and then curing the polysulphide sealant before actually mating the two surfaces.”.

John is directed to bringing together mating surfaces with a cured polysulphide sealant therebetween such that an accurate amount of the sealant is applied, the sealant is prevented from squeezing out from between the mating surfaces, and the cured sealant effectively adheres and seals the mating surfaces. John applies the cured sealant as a preformed film. There is no teaching in John away from simply directly coating the mating surfaces with the sealant and then curing the sealant prior to bringing the mating surfaces together as opposed to using a preformed film which both techniques of applying a sealant to mating surfaces are considered functionally equivalent for accomplishing the same as evidenced by Cheron, Ishiara, or Hanson.

Applicants further argue, “The Examiner on page 4 alleges that it is “well taken in the art” that there are two functionally equivalent techniques for providing an adhesive sealant between mating surfaces. Applicants refer to the Manual of Patent Examining

Procedure (MPEP) Section 2144.03 which states that “if the applicant traverses such an assertion [of some fact being well known] the examiner should cite a reference in support of his or her position.” Applicants traverse the Examiner’s contention that there are “two functionally equivalent techniques available for providing an adhesive/sealant between the mating surfaces of components.”

The Examiner’s contention is respectfully traversed, as, even though the Examiner cites any one of the Cheron, Ishiara, Hanson, Fournier and Nakamura references, not one of those references contains any teaching of curing a polysulphide sealant **prior to** bringing together the mating surfaces. Each one of the references either teaches an uncured sealant or adhesives that are applied which are not cured until after the mating surfaces are brought together.”

Applicants traversal is noted. However, the assertion that there are “two functionally equivalent techniques available for providing an adhesive/sealant between the mating surfaces of components” is supported by Cheron, Ishiara, or Hanson which demonstrate applying an adhesive coating through either of directly coating the mating surfaces or using a film wherein both techniques are equally suitable, i.e. functionally equivalent, to accomplish the same. Applicants traversal that “not one of those references contains any teaching of curing a polysulphide sealant **prior to** bringing together the mating surfaces” is also noted. However, no assertion was made that Cheron, Ishiara, or Hanson taught curing a polysulphide sealant prior to bringing together the mating surfaces. John requires that the polysulphide sealant be cured prior to bringing together the mating surfaces such that an accurate amount of the sealant is applied, the sealant is prevented from squeezing out from between the mating surfaces, and the cured sealant effectively adheres and seals the mating surfaces.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John L. Goff
Primary Examiner
Art Unit 1791